



US 20210383100A1

(19) **United States**(12) **Patent Application Publication**
Dahlkamp et al.(10) **Pub. No.: US 2021/0383100 A1**(43) **Pub. Date: Dec. 9, 2021**(54) **IDENTIFYING OBJECTS WITHIN IMAGES
FROM DIFFERENT SOURCES****Publication Classification**(71) Applicant: **Apple Inc.**, Cupertino, CA (US)(72) Inventors: **Hendrik Dahlkamp**, Palo Alto, CA (US); **Vinay Sharma**, Palo Alto, CA (US); **Nitin Gupta**, Cupertino, CA (US); **Floris Chabert**, San Francisco, CA (US); **Andrew C. Edwards**, Los Altos, CA (US); **Mitchell Williams**, San Diego, CA (US); **Jonghoon Jin**, Cupertino, CA (US); **Nicholas M. Fraioli**, Mountain View, CA (US); **Aravindhnan K. Krishnan**, San Jose, CA (US); **Patrick L. Coffman**, San Francisco, CA (US)(73) Assignee: **Apple Inc.**, Cupertino, CA (US)(21) Appl. No.: **17/033,423**(22) Filed: **Sep. 25, 2020****Related U.S. Application Data**

(60) Provisional application No. 63/034,114, filed on Jun. 3, 2020.

(51) **Int. Cl.****G06K 9/00** (2006.01)**G06T 7/11** (2006.01)**G06K 9/62** (2006.01)**G06F 21/60** (2006.01)**H04L 9/08** (2006.01)(52) **U.S. Cl.**CPC **G06K 9/00288** (2013.01); **G06T 7/11** (2017.01); **G06K 9/6215** (2013.01); **G06T 2207/30201** (2013.01); **G06F 21/602** (2013.01); **H04L 9/085** (2013.01); **G06T 2207/20132** (2013.01); **G06K 9/00926** (2013.01)

(57)

ABSTRACT

Techniques are disclosed for providing a notification that a person is at a particular location. For example, a resident device may receive from a user device an image that shows a face of a first person, the image being captured by a first camera of the user device. The resident device may also receive, from another device having a second camera, a second image showing a portion of a face of a second person, the second camera having a viewable area showing a particular location. The resident device may determine a score indicating a level of similarity between a first set of characteristics associated with the face of the first person and a second set of characteristics associated with the face of a second person. The resident device may then provide to the user device a notification based on determining the score.

